Permit No.: 64126 P5
Span Code No.: 06

APPLICATION OF: ________ PERMIT NO.: ____
LEASE NAME: _______ WELL NO.: ____
TYPE OF INSPECTION: ____ SECT. ___ TWP. ___ RANGE ___

Estimation of Zone of Endangering Influence

Specific Gravity = SP. GR. = _____ X .433 = _____ PSI/FT

(Hydrostatic Gradient)

Injection Rate	=	Q =	______________	B/D
Pay Thickness (EFF.)	=	h =	______________	FT.
Compressibility	=	c =	7.5×10^{-6}	PSI^{-1}
Fluid Viscosity	=	μ =	1.0	cps
Injection Time	=	t =	7300	Days
Permeability	=	k =	______________	mds
Porosity	=	φ =	______________	%
Formation Volume Factor	=	β =	1.0	
Initial Reservoir Pressure	=	P_i =	______________	PSI
Top of Injection Zone		=	______________	FT.
Base of USDW		=	______________	B/D

Reservoir Pressure (at Radius r)

$$P_r = P_i + 162.6 \frac{Q\mu\beta}{kh} \log \left(\frac{kt}{70.4\varphi\mu c r^2} \right)$$

P_r = _________ + 162.6 (_______________) log (______________________________)
( )
(70.4( )1.0(7.5x10^{-6}) ( )^2)

1 / Hydrostatic Gradient = 1 / ( ) = ______________ FT./PSI.

At r = 1 FT. P_r = __________ PSI x ____ = Hydrostatic Column
Hydrostatic Column = ___________ FT.
At r = 10 FT. P_r = __________ PSI x _____ = Hydrostatic Column
Hydrostatic Column = ___________ FT.
At r = 100 FT. P_r = __________ PSI x _____ = Hydrostatic Column
Hydrostatic Column = ___________ FT.
At r = 1000 FT. P_r = __________ PSI x _____ = Hydrostatic Column
Hydrostatic Column = ___________ FT.
At r = 1320 FT. P_r = __________ PSI x _____ = Hydrostatic Column
Hydrostatic Column = ___________ FT.

Radius of Endangering Influence = ________ FT.
(From plot of Hydrostatic Column)